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ABSTRACT OF THE DISCLOSURE

A cleaning processing system for applying a cleaning processing to a substrate such as a semiconductor wafer comprises a cleaning processing section including a plurality of process units each serving to apply a predetermined treatment to a wafer W and a loading/unloading section 2 for loading and unloading the wafer W into and out of the cleaning processing section. The cleaning processing section includes four scrub cleaning units consisting of two scrub cleaning units arranged side by side and two additional cleaning units stacked on the two scrub cleaning units arranged side by side, respectively, so as to form upper and lower stages of the scrub cleaning units, a wafer inversion unit for turning the wafer W upside down, a wafer transit unit having the wafer W disposed thereon temporarily for performing the transfer of the wafer W to and from the transfer section, and a main wafer transfer mechanism capable of gaining access to all of these units and performing the transfer of the wafer W between different units.